

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/812,238B
Source: IFW16
Date Processed by STIC: 8/25/05

ENTERED

CRF Errors Edited by the STIC Systems Branch

Serial Number: 10/8/2,238B

CRF Edit Date: 8/29/05
Edited by: Ar

___ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

___ Corrected the SEQ ID NO. Sequence numbers edited were:

___ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

___ Deleted: invalid beginning/end-of-file text ; page numbers

___ Inserted mandatory headings/numeric identifiers, specifically:

___ Moved responses to same line as heading/numeric identifier, specifically:

___ Other:



IFW16

RAW SEQUENCE LISTING

DATE: 08/29/2005

PATENT APPLICATION: US/10/812,238B

TIME: 10:34:20

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\08292005\J812238B.raw

3 <110> APPLICANT: Wary, Kishore, K.
 4 Humtsoe, Joseph O.
 6 <120> TITLE OF INVENTION: Uses of Vascular Endothelial Growth Factor
 7 and Type I Collagen Inducible Protein (VCIP)
 9 <130> FILE REFERENCE: D6563
 11 <140> CURRENT APPLICATION NUMBER: US 10/812,238B
 12 <141> CURRENT FILING DATE: 2004-03-29
 14 <150> PRIOR APPLICATION NUMBER: US 60/458,164
 15 <151> PRIOR FILING DATE: 2003-03-27
 17 <160> NUMBER OF SEQ ID NOS: 41
 20 <210> SEQ ID NO: 1
 21 <211> LENGTH: 15
 22 <212> TYPE: PRT
 23 <213> ORGANISM: Unknown
 25 <220> FEATURE:
 26 <221> NAME/KEY: CHAIN
 27 <223> OTHER INFORMATION: peptide used to raise anti-VCIP-cyto-C16
 28 antibody
 30 <400> SEQUENCE: 1
 31 Leu Ser Pro Val Asp Ile Ile Asp Arg Asn Asn His His Asn Met
 32 5 10 15
 35 <210> SEQ ID NO: 2
 36 <211> LENGTH: 20
 37 <212> TYPE: PRT
 38 <213> ORGANISM: Unknown
 40 <220> FEATURE:
 41 <221> NAME/KEY: CHAIN
 42 <223> OTHER INFORMATION: peptide used to raise anti-VCIP-RGD antibody
 44 <400> SEQUENCE: 2
 45 Glu Gly Tyr Ile Gln Asn Tyr Arg Cys Arg Gly Asp Asp Ser Lys
 46 5 10 15
 47 Val Gln Glu Ala Arg
 48 20
 51 <210> SEQ ID NO: 3
 52 <211> LENGTH: 33
 53 <212> TYPE: DNA
 54 <213> ORGANISM: Artificial Sequence
 56 <220> FEATURE:
 57 <221> NAME/KEY: primer_bind
 58 <223> OTHER INFORMATION: forward primer for VCIP
 60 <400> SEQUENCE: 3
 61 ggaggatccc tcgcgccgca gccagcgcca tgc 33
 64 <210> SEQ ID NO: 4

p.6

RAW SEQUENCE LISTING

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PATENT APPLICATION: US/10/812,238B

TIME: 10:34:20

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\08292005\J812238B.raw

65 <211> LENGTH: 25
66 <212> TYPE: DNA
67 <213> ORGANISM: Artificial Sequence
69 <220> FEATURE:
70 <221> NAME/KEY: primer_bind
71 <223> OTHER INFORMATION: reverse primer for VCIP
73 <400> SEQUENCE: 4
74 gtggcaccta catcatgttg tgggtg 25
77 <210> SEQ ID NO: 5
78 <211> LENGTH: 22
79 <212> TYPE: DNA
80 <213> ORGANISM: Artificial Sequence
82 <220> FEATURE:
83 <221> NAME/KEY: primer_bind
84 <223> OTHER INFORMATION: forward primer for human uPAR
86 <400> SEQUENCE: 5
87 cttcctgaaa tgcgtcaaca cc 22
90 <210> SEQ ID NO: 6
91 <211> LENGTH: 22
92 <212> TYPE: DNA
93 <213> ORGANISM: Artificial Sequence
95 <220> FEATURE:
96 <221> NAME/KEY: primer_bind
97 <223> OTHER INFORMATION: reverse primer for human uPAR
99 <400> SEQUENCE: 6
100 tcatagctgg gaaaactgag gc 22
103 <210> SEQ ID NO: 7
104 <211> LENGTH: 22
105 <212> TYPE: DNA
106 <213> ORGANISM: Artificial Sequence
108 <220> FEATURE:
109 <221> NAME/KEY: primer_bind
110 <223> OTHER INFORMATION: forward primer for ?-actin
112 <400> SEQUENCE: 7
113 ggctgtgcta tccctgtacg cc 22
116 <210> SEQ ID NO: 8
117 <211> LENGTH: 22
118 <212> TYPE: DNA
119 <213> ORGANISM: Artificial Sequence
121 <220> FEATURE:
122 <221> NAME/KEY: primer_bind
123 <223> OTHER INFORMATION: reverse primer for ?-actin
125 <400> SEQUENCE: 8
126 gggcagtgat ctcttctgc at 22
129 <210> SEQ ID NO: 9
130 <211> LENGTH: 23
131 <212> TYPE: DNA
132 <213> ORGANISM: Artificial Sequence
134 <220> FEATURE:

RAW SEQUENCE LISTING

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Input Set : A:\PTO.AMC.txt

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135 <221> NAME/KEY: primer_bind
136 <223> OTHER INFORMATION: forward primer for GAPDH
138 <400> SEQUENCE: 9
139 ggtctcctct gacttcaaca gcg      23
142 <210> SEQ ID NO: 10
143 <211> LENGTH: 24
144 <212> TYPE: DNA
145 <213> ORGANISM: Artificial Sequence
147 <220> FEATURE:
148 <221> NAME/KEY: primer_bind
149 <223> OTHER INFORMATION: reverse primer for GAPDH
151 <400> SEQUENCE: 10
152 ggtactttat tgatggtaca tgac      24
155 <210> SEQ ID NO: 11
156 <211> LENGTH: 6
157 <212> TYPE: PRT
158 <213> ORGANISM: Unknown
160 <220> FEATURE:
161 <221> NAME/KEY: CHAIN
162 <223> OTHER INFORMATION: a peptide containing RGD sequence
164 <400> SEQUENCE: 11
165 Gly Arg Gly Asp Ser Pro
166      5
169 <210> SEQ ID NO: 12
170 <211> LENGTH: 9
171 <212> TYPE: PRT
172 <213> ORGANISM: Unknown
174 <220> FEATURE:
175 <221> NAME/KEY: CHAIN
176 <223> OTHER INFORMATION: HA-tag
178 <400> SEQUENCE: 12
179 Tyr Pro Tyr Asp Val Pro Asp Tyr Ala
180      5
183 <210> SEQ ID NO: 13
184 <211> LENGTH: 311
185 <212> TYPE: PRT
186 <213> ORGANISM: Unknown
188 <220> FEATURE:
189 <221> NAME/KEY: CHAIN
190 <223> OTHER INFORMATION: human VCIP
192 <400> SEQUENCE: 13
193 Met Gln Asn Tyr Lys Tyr Asp Lys Ala Ile Val Pro Glu Ser Lys
194      5              10              15
195 Asn Gly Gly Ser Pro Ala Leu Asn Asn Asn Pro Arg Arg Ser Gly
196      20              25              30
197 Ser Lys Arg Val Leu Leu Ile Cys Leu Asp Leu Phe Cys Leu Phe
198      35              40              45
199 Met Ala Gly Leu Pro Phe Leu Ile Ile Glu Thr Ser Thr Ile Lys
200      50              55              60

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RAW SEQUENCE LISTING

DATE: 08/29/2005

PATENT APPLICATION: US/10/812,238B

TIME: 10:34:20

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\08292005\J812238B.raw

```

201 Pro Tyr His Arg Gly Phe Tyr Cys Asn Asp Glu Ser Ile Lys Tyr
202                               65                               70                               75
203 Pro Leu Lys Thr Gly Glu Thr Ile Asn Asp Ala Val Leu Cys Ala
204                               80                               85                               90
205 Val Gly Ile Val Ile Ala Ile Leu Ala Ile Ile Thr Gly Glu Phe
206                               95                               100                              105
207 Tyr Arg Ile Tyr Tyr Leu Lys Lys Ser Arg Ser Thr Ile Gln Asn
208                               110                              115                              120
209 Pro Tyr Val Ala Ala Leu Tyr Lys Gln Val Gly Cys Phe Leu Phe
210                               125                              130                              135
211 Gly Cys Ala Ile Ser Gln Ser Phe Thr Asp Ile Ala Lys Val Ser
212                               140                              145                              150
213 Ile Gly Arg Leu Arg Pro His Phe Leu Ser Val Cys Asn Pro Asp
214                               155                              160                              165
215 Phe Ser Gln Ile Asn Cys Ser Glu Gly Tyr Ile Gln Asn Tyr Arg
216                               170                              175                              180
217 Cys Arg Gly Asp Asp Ser Lys Val Gln Glu Ala Arg Lys Ser Phe
218                               185                              190                              195
219 Phe Ser Gly His Ala Ser Phe Ser Met Tyr Thr Met Leu Tyr Leu
220                               200                              205                              210
221 Val Leu Tyr Leu Gln Ala Arg Phe Thr Trp Arg Gly Ala Arg Leu
222                               215                              220                              225
223 Leu Arg Pro Leu Leu Gln Phe Thr Leu Ile Met Met Ala Phe Tyr
224                               230                              235                              240
225 Thr Gly Leu Ser Arg Val Ser Asp His Lys His His Pro Ser Asp
226                               245                              250                              255
227 Val Leu Ala Gly Phe Ala Gln Gly Ala Leu Val Ala Cys Cys Ile
228                               260                              265                              270
229 Val Phe Phe Val Ser Asp Leu Phe Lys Thr Lys Thr Thr Leu Ser
230                               275                              280                              285
231 Leu Pro Ala Pro Ala Ile Arg Lys Glu Ile Leu Ser Pro Val Asp
232                               290                              295                              300
233 Ile Ile Asp Arg Asn Asn His His Asn Met Met
234                               305                              310
237 <210> SEQ ID NO: 14
238 <211> LENGTH: 18
239 <212> TYPE: PRT
240 <213> ORGANISM: Unknown
242 <220> FEATURE:
243 <221> NAME/KEY: CHAIN
244 <223> OTHER INFORMATION: lipid phosphatase domain of human VCIP
246 <400> SEQUENCE: 14
247 Asp Ile Ala Lys Val Ser Ile Gly Arg Leu Arg Pro His Phe Leu
248                               5                               10                               15
249 Ser Val Cys
252 <210> SEQ ID NO: 15
253 <211> LENGTH: 18
254 <212> TYPE: PRT
255 <213> ORGANISM: Unknown

```

RAW SEQUENCE LISTING

DATE: 08/29/2005

PATENT APPLICATION: US/10/812,238B

TIME: 10:34:20

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\08292005\J812238B.raw

```

257 <220> FEATURE:
258 <221> NAME/KEY: CHAIN
259 <223> OTHER INFORMATION: a rat peptide containing lipid
260     phosphatase domain
262 <400> SEQUENCE: 15
263 Asp Ile Ala Lys Tyr Ser Ile Gly Arg Leu Arg Pro His Phe Leu
264           5              10              15
265 Ala Val Cys
268 <210> SEQ ID NO: 16
269 <211> LENGTH: 18
270 <212> TYPE: PRT
271 <213> ORGANISM: Unknown
273 <220> FEATURE:
274 <221> NAME/KEY: CHAIN
275 <223> OTHER INFORMATION: a mouse peptide containing lipid
276     phosphatase domain
278 <400> SEQUENCE: 16
279 Asp Ile Ala Lys Tyr Thr Ile Gly Ser Leu Arg Pro His Phe Leu
280           5              10              15
281 Ala Ile Cys
284 <210> SEQ ID NO: 17
285 <211> LENGTH: 18
286 <212> TYPE: PRT
287 <213> ORGANISM: Unknown
289 <220> FEATURE:
290 <221> NAME/KEY: CHAIN
291 <223> OTHER INFORMATION: a human peptide containing lipid
292     phosphatase domain
294 <400> SEQUENCE: 17
295 Asp Leu Ala Lys Tyr Met Ile Gly Arg Leu Arg Pro Asn Phe Leu
296           5              10              15
297 Ala Val Cys
300 <210> SEQ ID NO: 18
301 <211> LENGTH: 18
302 <212> TYPE: PRT
303 <213> ORGANISM: Unknown
305 <220> FEATURE:
306 <221> NAME/KEY: CHAIN
307 <223> OTHER INFORMATION: a Drosophila peptide containing lipid
308     phosphatase domain
310 <400> SEQUENCE: 18
311 Asn Ile Ala Lys Tyr Ser Ile Gly Arg Leu Arg Pro His Phe Tyr
312           5              10              15
313 Thr Leu Cys
316 <210> SEQ ID NO: 19
317 <211> LENGTH: 18
318 <212> TYPE: PRT
319 <213> ORGANISM: C. elegans
321 <220> FEATURE:

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/812,238B

DATE: 08/29/2005
TIME: 10:34:21

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\08292005\J812238B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:38; Xaa Pos. 2,3,4,5,6,7

Seq#:40; Xaa Pos. 3,4,5,6,7,9,10,11

VERIFICATION SUMMARY

DATE: 08/29/2005

PATENT APPLICATION: US/10/812,238B

TIME: 10:34:21

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\08292005\J812238B.raw

L:586 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0

L:613 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:40

L:613 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:0

**Raw Sequence Listing before editing
(for reference only)**



IFW16

RAW SEQUENCE LISTING

DATE: 08/25/2005

PATENT APPLICATION: US/10/812,238B

TIME: 12:58:38

Input Set : A:\D6563SEQ.txt

Output Set: N:\CRF4\08252005\J812238B.raw

3 <110> APPLICANT: Wary, Kishore, K.
 4 Humtsoe, Joseph O.
 6 <120> TITLE OF INVENTION: Uses of Vascular Endothelial Growth Factor
 7 and Type I Collagen Inducible Protein (VCIP)
 9 <130> FILE REFERENCE: D6563
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/812,238B
 12 <141> CURRENT FILING DATE: 2004-03-29
 14 <150> PRIOR APPLICATION NUMBER: US 60/458,164
 15 <151> PRIOR FILING DATE: 2003-03-27
 17 <160> NUMBER OF SEQ ID NOS: 41

ERRORED SEQUENCES

Does Not Comply
Corrected Diskette Needed

617 <210> SEQ ID NO: 41
 618 <211> LENGTH: 5
 619 <212> TYPE: PRT
 620 <213> ORGANISM: Artificial Sequence
 622 <220> FEATURE:
 623 <223> OTHER INFORMATION: amino acid sequence in peptide derived from VCIP
 625 <400> SEQUENCE: 41
 626 Cys Arg Gly Asp Asp
 627 5
 E--> 630 ??
 E--> 632 ??
 E--> 634 ??
 E--> 636 ??

VARIABLE LOCATION SUMMARY

DATE: 08/25/2005

PATENT APPLICATION: US/10/812,238B

TIME: 12:58:39

Input Set : A:\D6563SEQ.txt

Output Set: N:\CRF4\08252005\J812238B.raw

Use of n's or Xaa's (NEW RULES):

Use of n's and/or Xaa's have been detected in the Sequence Listing.

Use of <220> to <223> is MANDATORY if n's or Xaa's are present.

in <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

Seq#:38; Xaa Pos. 2,3,4,5,6,7

Seq#:40; Xaa Pos. 3,4,5,6,7,9,10,11

VERIFICATION SUMMARY

DATE: 08/25/2005

PATENT APPLICATION: US/10/812,238B

TIME: 12:58:39

Input Set : A:\D6563SEQ.txt

Output Set: N:\CRF4\08252005\J812238B.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number
L:586 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0
L:613 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:40
L:613 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:0
L:630 M:333 E: Wrong sequence grouping, Amino acids not in groups!
L:630 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1
L:632 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:41
L:632 M:333 E: Wrong sequence grouping, Amino acids not in groups!
L:632 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1
M:332 Repeated in SeqNo=41
L:634 M:333 E: Wrong sequence grouping, Amino acids not in groups!
L:634 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1
L:636 M:333 E: Wrong sequence grouping, Amino acids not in groups!
L:636 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1